Build a Tree House

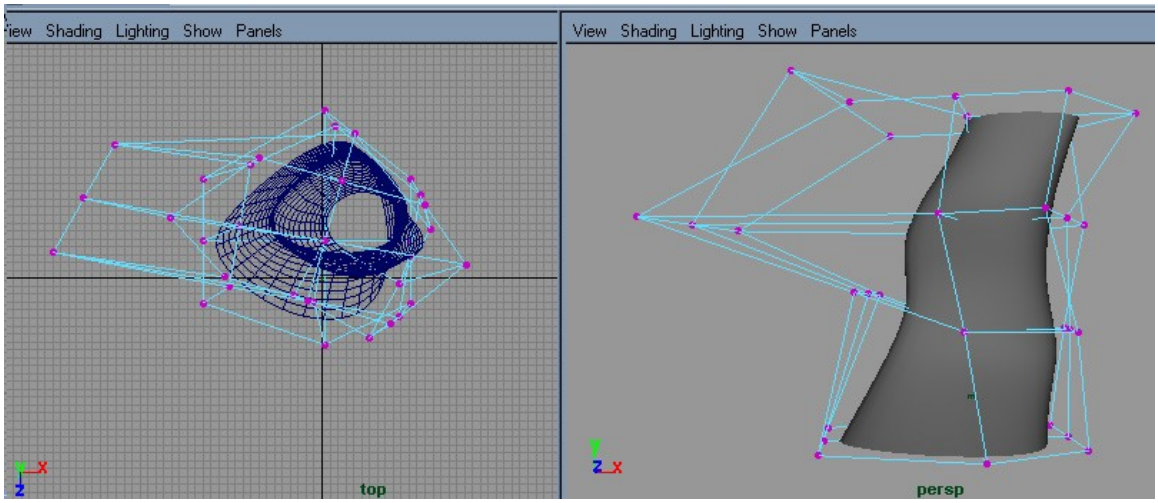
This article will show you how the Tree House is created using Maya. The house is belongs to a character that we created in our animation sequence. We have a concept where the setting should be cartoon like, where the place exists in middle of nowhere. Finally we come out this design, after some sketches were done.

(Yep, that's my house. How do you like it?)

I will skip all the steps like " press 3 for highest resolution display", " go to Deform, create lattice", " hold down space bar to evoke Hotbox" and etc. All right, without any further ado, let's get started.

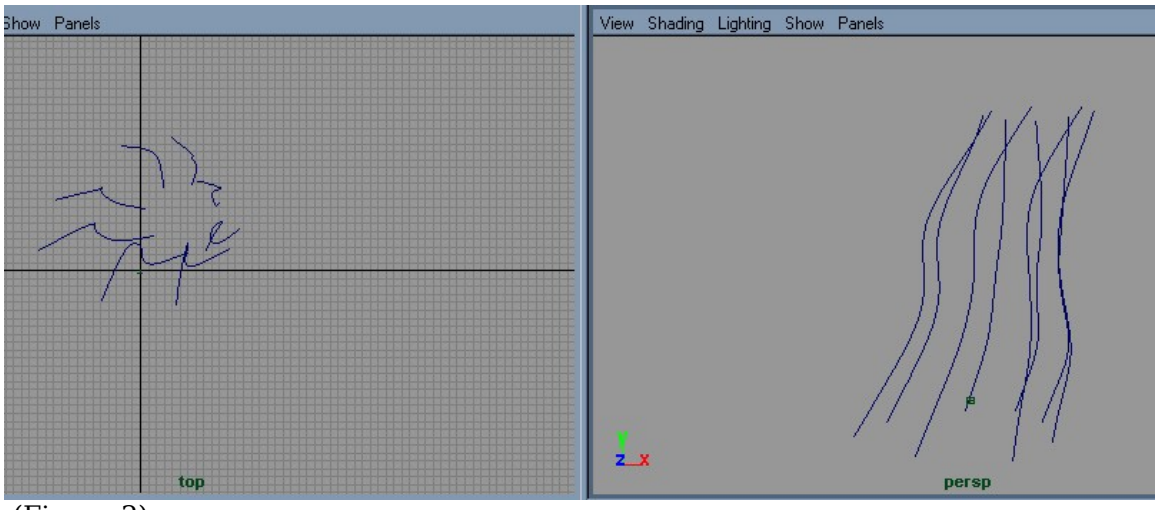
Model the tree trunk

1. Create a NURBS cylinder, create lattice. Twist and pull the lattice point into the basic shape I want. When done, delete history to remove deformer. (Figure 1)



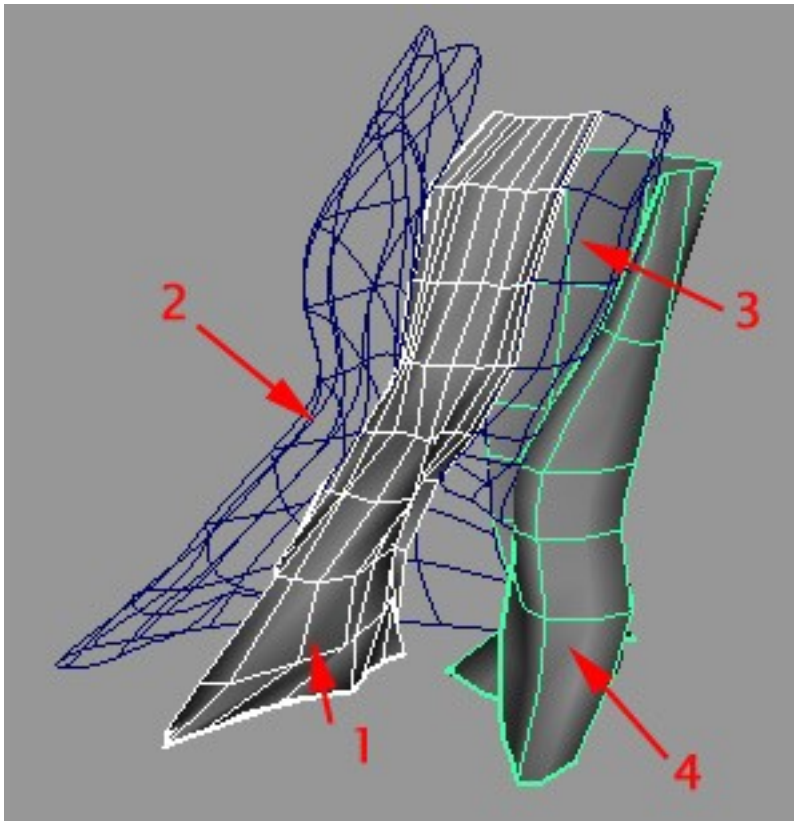
(Figure 1)

2. Then I want the tree trunk to build with deference surfaces. I then select all isoparm of the surface, and go to curve, duplicate surface curve. After I had duplicated the surface curve. I delete the NURBS cylinder, as well as horizontal curves. So I have something like this.(Figure 2)



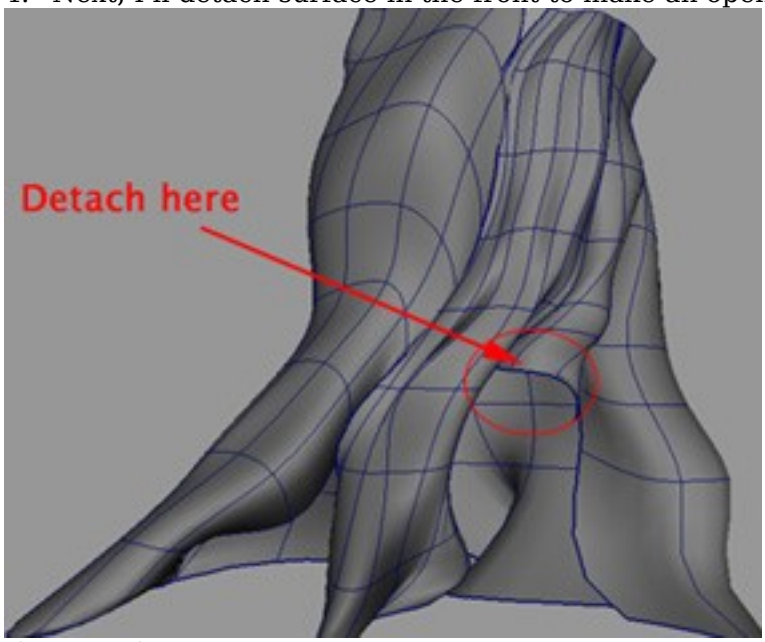
(Figure 2)

3. I will then loft few curves to form surfaces. After the surfaces formed, keep pulling the CVs so that it look like tree trunk. This tree trunk is formed by 4 surfaces.(Figure 3)



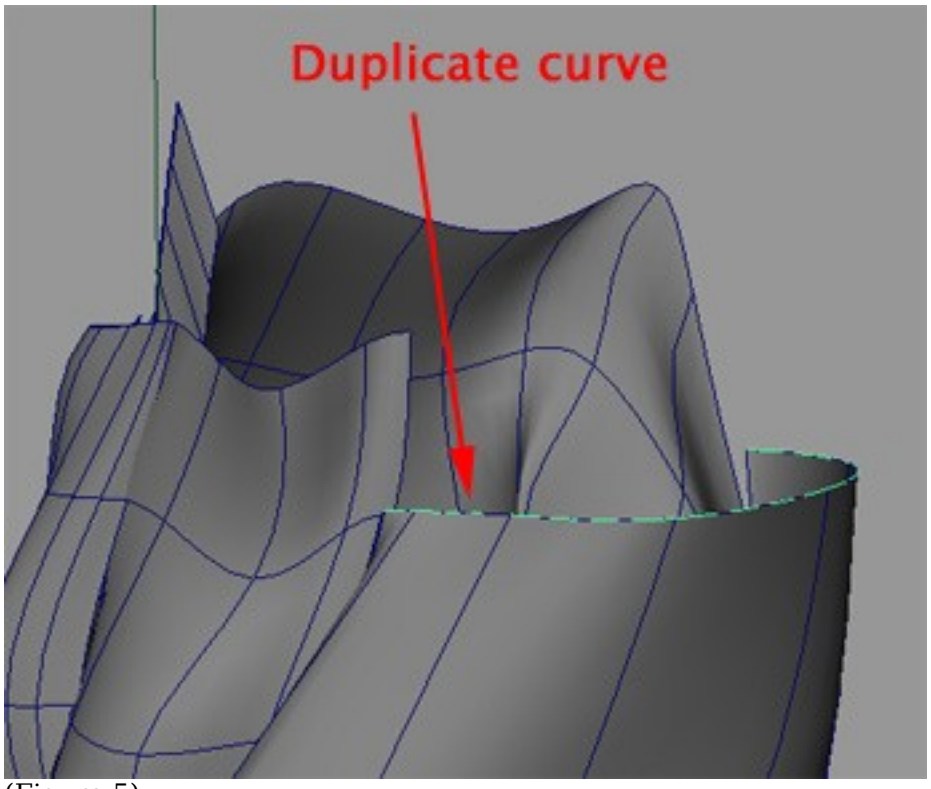
(Figure 3)

4. Next, I'll detach surface in the front to make an opening for door.(Figure 4)



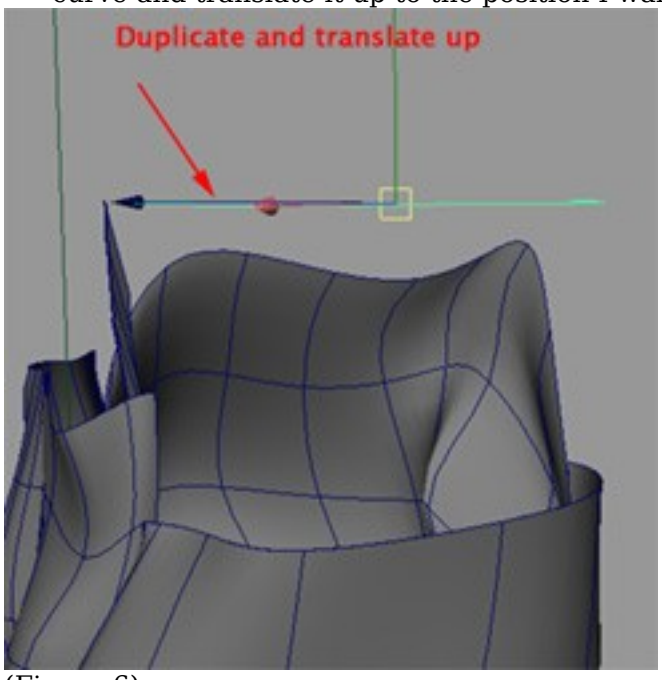
(Figure 4)

5. Now I will create the irregular shape of tree trunk to make it look like broken part. Select any one surface, pick the top edge isoparm, then duplicate surface curve.(Figure 5)



(Figure 5)

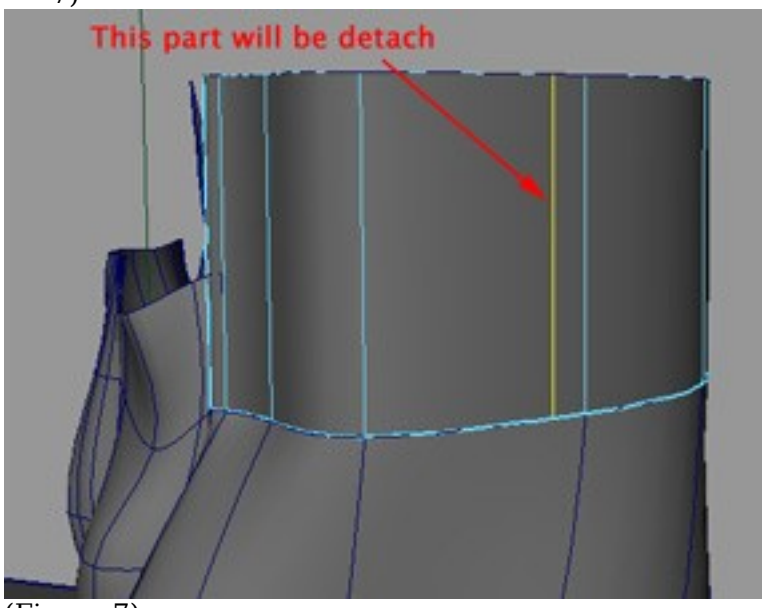
6. When done, with the curve still selected, I then go to Edit, Duplicate another curve and translate it up to the position I want.(Figure 6)



(Figure 6)

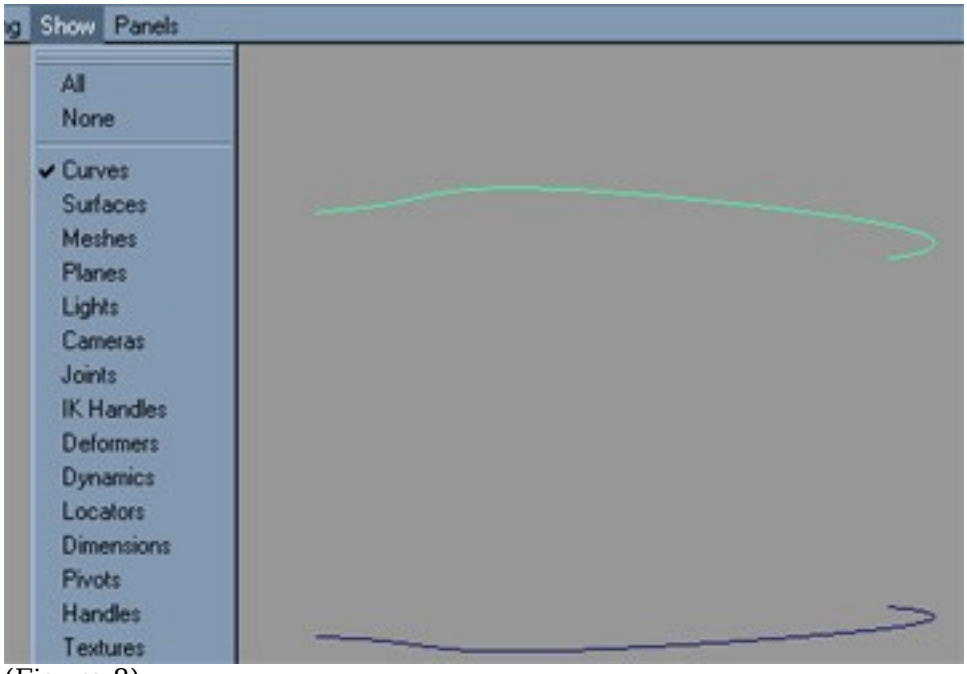
7. Then I select both curve and perform loft to form a surface. When the surface formed, I select the vertical isoparm somewhere in the middle, then detach it.

This is to split the surface into 2 so that I can create more organic look.(Figure 7)



(Figure 7)

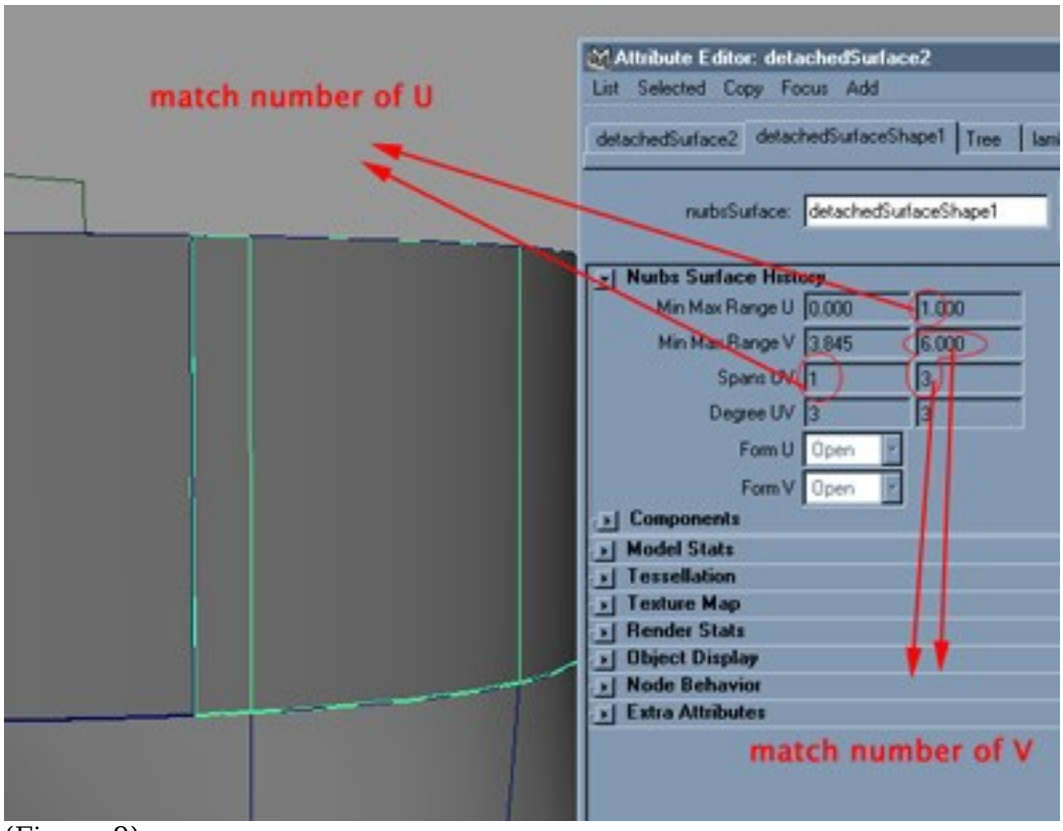
8. Don’t forget to delete history after you have detached the surface. Go to Show, none to turn off every object, again go to Show, Curves to display only curves in the window. Then delete all curves. After all curve deleted, go to Show, All to turn on all object display. Or you can pick mask curves to pick curves and delete it.(Figure 8)



(Figure 8)

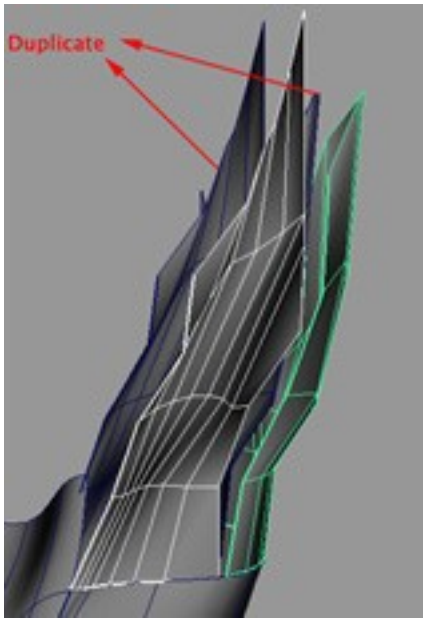
9. Then I will rebuild these surfaces. Select 1 surface, Ctrl-a to bring up Attribute Window. Note that Min Max Range of UV are not matching with Spans UV. By

rebuilding surface we can make them matching each other. Go to Edit surface, Rebuild surface, tick CVs in Keep column, then click rebuild. (Figure 9)



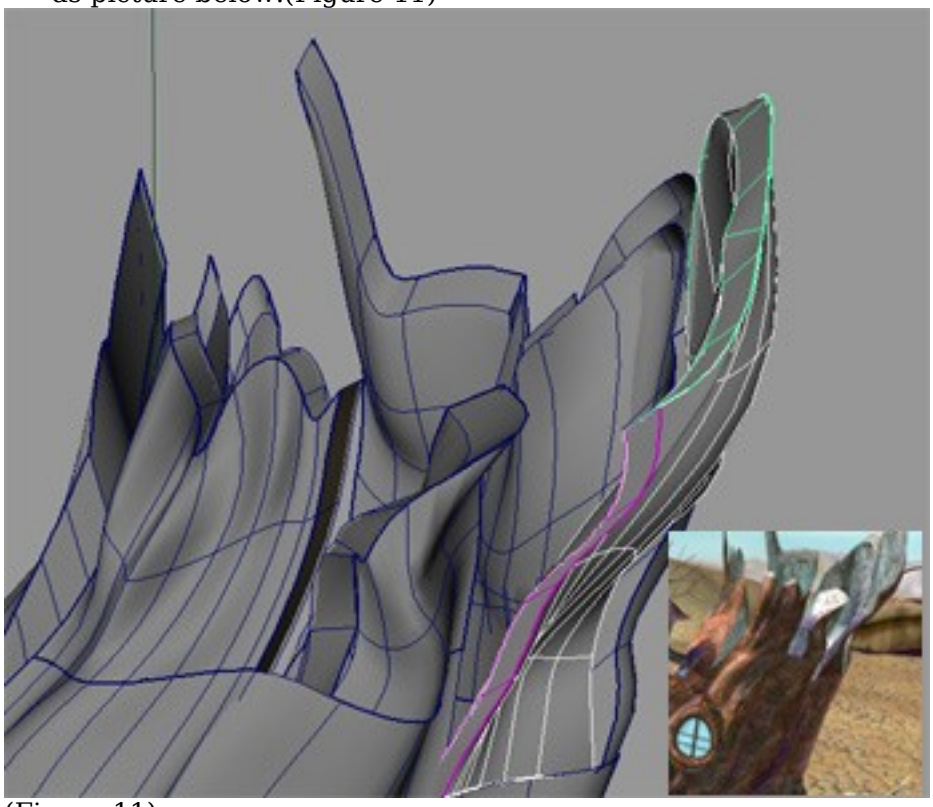
(Figure 9)

10. Now, I start to pull the CVs of the surface into the shape I want. After I had done, I duplicate them and translate them inside. This will use to create thickness of the broken surfaces.(Figure 10)



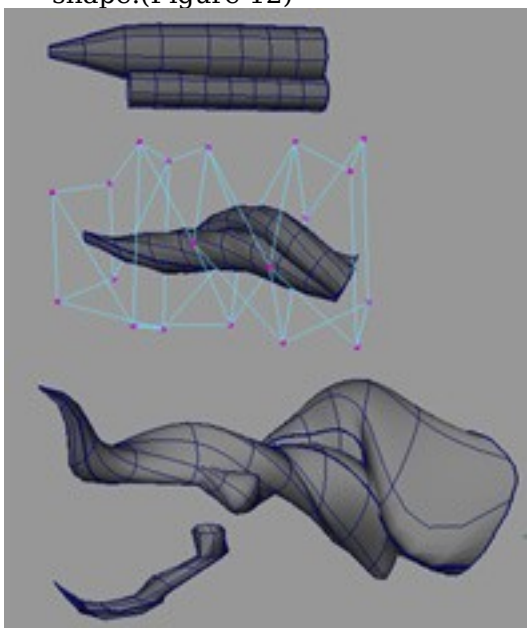
(Figure 10)

11. I now select 2 isoparms edge from 2 surfaces and loft them. The result is shown as picture below.(Figure 11)



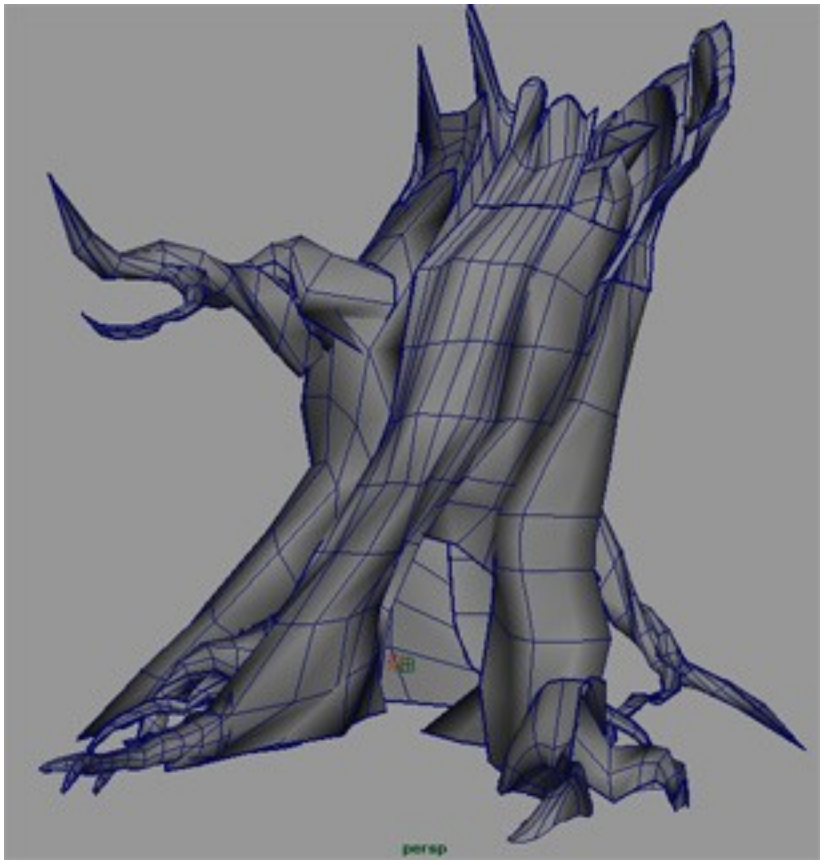
(Figure 11)

12. It is time to create branches. The branches are created by 2 cylinder then add lattice to both and twist them together. Pull CVs is needed to fine-tune the shape.(Figure 12)



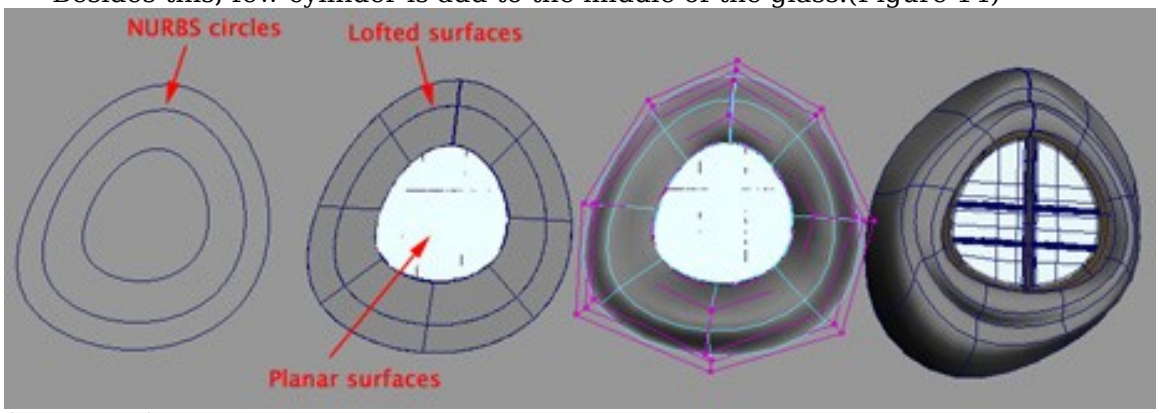
(Figure 12)

13. Some small branches is put together with the main branch. After Putting the branches together. I get the picture below.(Figure 13)



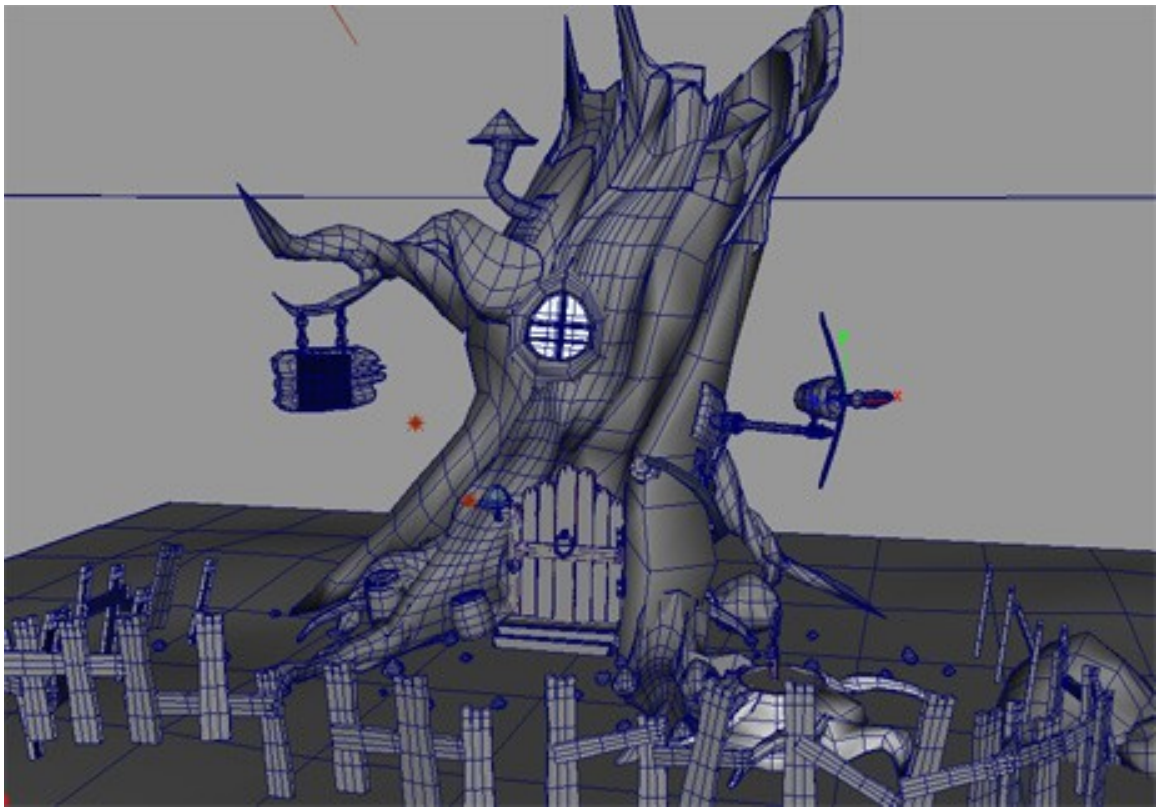
(Figure 13)

14. Now, I will use NURBS circle to model the window. First I create 1 NURBS circle, then I duplicate and scale it. Glass surface is formed by go to Surface, Planar. The tree surface is lofted and pull the CVs into the shape I want. Lastly I create a small NURBS circle to extrude it along the glass to form window cane. Besides this, few cylinder is add to the middle of the glass.(Figure 14)



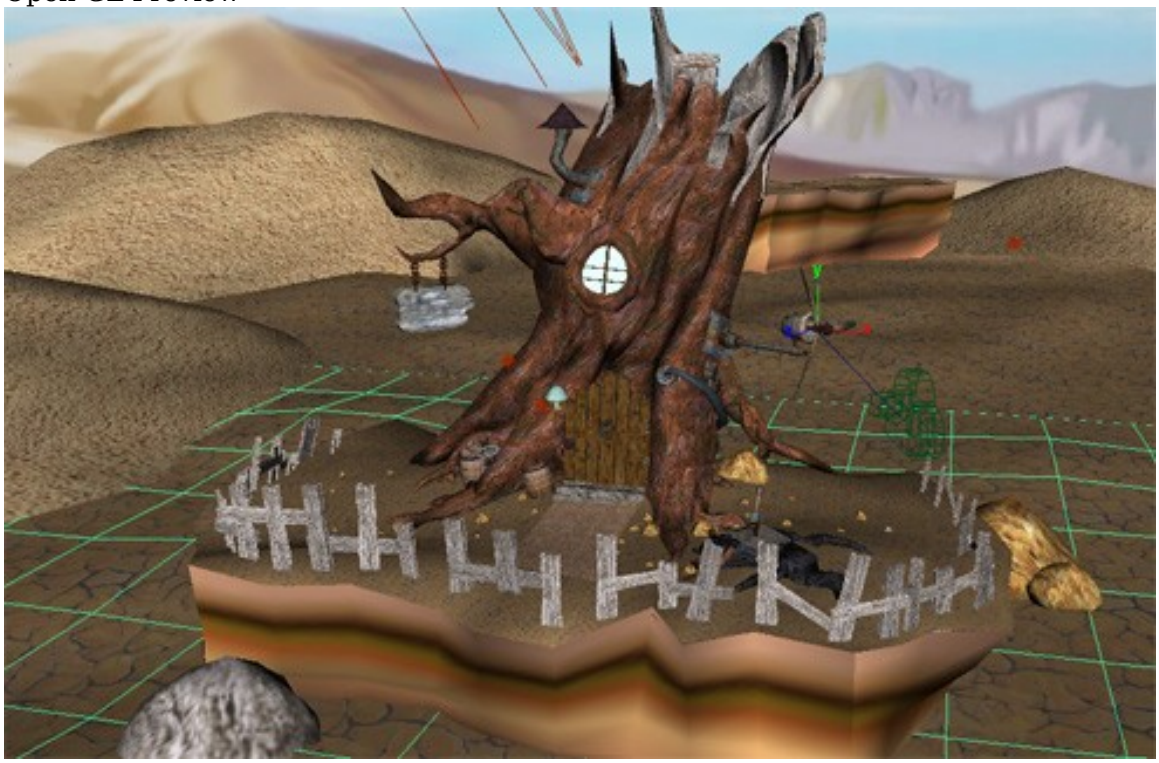
(Figure 14)

15. After that, I put the window to the tree and add in some small gadget. Then I model the door with the same tools. The picture is shown as below. (Figure 15)



(Figure 15)

Open GL Preview



email : keongputer@hotmail.com